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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,220	01/28/2004	Jethro Liou	46858.00023	2893

7590 01/12/2005

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EXAMINER
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PASSANITI, SEBASTIANO

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/766,220

**Applicant(s)**

LIOU, JETHRO

**Examiner**

Sebastiano Passaniti

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on see detailed Office action.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

This Office action is responsive to communication received 01/28/2004 – application papers filed; 08/20/2004 – Oath and Request for Extension of Time.

Claims 1-11 are pending.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo. As to claim 1, Lo shows a metallic assembly comprising a sole, face, top and hosel along with a composite cover (12, 14). The composite cover(s) and the metallic assembly are bonded together to form a completed club head assembly. As to claim 3, the covers (12, 14) may comprise graphite-epoxy material (col. 3, lines 1-3). As to claims 5 and 6, the metallic assembly may comprise stainless steel or other durable material (col. 2, lines 52-54).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Liang and Wood. Lo differs from the claimed invention in that Lo does not show two

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openings in a rear portion of the sole plate. Each of Liang and Wood show it to be old in the art to include a metallic shell in which the sole or rear portion includes plural openings. Applicant's construction including two holes in the rear of the sole mimics the concept of lattice-type structures displayed by both Liang and Wood. This arrangement, as best explained by Wood (col. 2, line 55 through col. 3, line 4) provides the club maker with the ability to enlarge the volume of the club head without sacrificing structural integrity of the outer shell. In addition, the weight distribution of the head may be desirably readjusted by filling the voids or openings with materials that are less dense than the materials that make up the remainder of the shell body. In view of the patents to Liang and Wood and the above reasoning, it would have been obvious to modify the device in the cited art reference to Lo by including two openings in the rear of the sole, much like the two openings in the crown, the motivation being to assist with the distribution of the head weight.

Claims 4, 7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Su. Lo differs from the claimed invention in that Lo does not specifically detail a construction technique in which the diverse shell pieces are formed and subsequently welded together or an assembly in which the covers of the crown assembly are bonded to the remainder of the club head assembly. Su shows it to be old in the art to fabricate a hollow metallic club head from multiple pieces that are later joined using any one of a number of convenient and well-known processes such as welding, epoxying or screwing (col. 5, lines 39-48). In essence, Su teaches that it is old to combine both metallic and composite materials within the construction of the shell of

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a golf club head. In view of the patent to Su, it would have been obvious to modify the device in the cited art reference to Lo by bonding the composite covers to the top portion of the head, while separately forming the remaining sole, face, top and hosel pieces, said pieces later to be joined by welding, the motivation being to simply make use of conventional methods in the art for fixedly securing diverse elements of the club head assembly. Note, regarding claim 7, the claim requires that either the top or sole includes at least one opening and that the composite cover is designed to cover at least the opening and portions of the sole plate. One can see from a review of Figure 4 in Lo (extreme right side, near numeral 24) that the cover (30) covers at least a portion of the rear of the sole assembly, much in the same way that applicant has displayed the manner in which the claimed cover is fitted over the rear of the sole.

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Su, Ling and Wood. Lo in view of Su has been detailed above. Lo, as modified, differs from the claimed invention in that Lo does not show two openings in a rear portion of the sole plate. Each of Liang and Wood show it to be old in the art to include a metallic shell in which the sole or rear portion includes plural openings. Applicant's construction including two holes in the rear of the sole mimics the concept of lattice-type structures displayed by both Liang and Wood. This arrangement, as best explained by Wood (col. 2, line 55 through col. 3, line 4) provides the club maker with the ability to enlarge the volume of the club head without sacrificing structural integrity of the outer shell. In addition, the weight distribution of the head may be desirably readjusted by filling the voids or openings with materials that are less dense than the materials that

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make up the remainder of the shell body. In view of the patents to Liang and Wood and the above reasoning, it would have been obvious to modify the device in the cited art reference to Lo by including two openings in the rear of the sole, much like the two openings in the crown, the motivation being to assist with the distribution of the head weight.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mader shows a composite cover (20). Note crown portion (14b) in Hoshi. Cover (40) in Chen ('086) is formed of composite material. The three publications to Nakahara ('692, '693, '127) show a composite cover element, of interest. The publications to Shiell ('207, '208) show covers in the crown area, of interest. Cheng and Onoda show composite top covers (20) and (11), respectively. Chen ('608) and Kumamoto show crown portions formed of composite material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
January 8, 2005